

# A Pluralistic Theory of Wordhood

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## Abstract

What are words and how should we individuate them? There are two main answers on the philosophical market. For some, words are bundles of structural-functional features defining a unique performance profile. For others, words are non-eternal continuants individuated by their causal-historical ancestry. These conceptions offer competing views of the nature of words, and it seems natural to assume that at most one of them can capture the essence of wordhood. This paper makes a case for pluralism about wordhood: The view that there is a plurality of acceptable conceptions of the nature of words, none of which is uniquely entitled to inform us as to what wordhood consists in.

## 1. INTRODUCTION

Ontology is traditionally conceived of as the branch of philosophy in charge of compiling the *catalogue* of the furniture of reality. We accept that natural languages exist. Therefore, we find it intuitive to assume that natural languages should be reflected in the catalogue. We also accept that natural languages are composite entities. At the bare minimum, they can be split into an arsenal of signs associated by convention to a grammatical role and a semantic function, and a set of rules to combine them to express complex meanings. The arsenal of signs available to a language is generally referred to as its vocabulary or lexicon. This can be defined as the inventory of words available to the language. Therefore, we find it intuitive to assume that words should be listed in the catalogue.<sup>1</sup>

So suppose we are compiling the catalogue. As anticipated, we hold the pre-theoretical persuasion that the catalogue should record the inventory of words available to existing languages. We decide to begin with American English, and start counting how many words there are in the language. Ontology is a serious business, so we want the catalogue to be filled in as meticulously as it possibly can. We distinguish EAT and TABLE, SKY and SPOON, ESSENTIAL and INITIAL, WALK and FLY, MEAT and MEET,

1 Quick terminological caveat. The term “word” is ambiguous between a token reading and type reading. On the former reading, the term picks out observable, spatio-temporally located entities like utterances and inscriptions. On the latter reading, the term picks out the abstract lexical units that speakers take to be externalized, conveyed, or articulated by appropriately produced utterances and inscriptions. As this passage is making clear, this paper is about the nature of “words” in the type reading of the expression, and will consistently use it in that sense.

LEAD (the noun) and LEAD (the verb), FINE (the adjective) and FINE (the noun). Everything seems to be going fine. But trouble is on its way.

Unlike issues of word *meaning* in connection to long-standing philosophical puzzles (e.g., the semantics of singular terms in intensional contexts), issues surrounding the nature of words and the principles of word individuation are just starting to receive systematic attention in philosophical discussion.<sup>2</sup> The history of relative neglect of the topic is surprising, for at least two reasons. First, illuminating the nature of entities that are believed to be basic building blocks of natural languages is an interesting project in its own right. Second, the task appears directly relevant to other mainstream philosophical projects, such as the justification of brands of nominalism that reduce the shared exemplification of a property to being aptly predicable of “the same word” (Wetzel, 2009). Issues surrounding the nature of words and the principles of word individuation are generally downplayed as trivial in ordinary discourse, an impression reinforced by the existence of dictionaries and by the aura of authority surrounding them. Yet, compiling the list of the words available to a language is a task requiring a great deal of reflection and decision-making. A few examples to illustrate the point (more in Kilgariff, 2015).

- *Productivity*. Derivational morphology specifies rules to form new words on the basis of preexisting lexical material (Bauer, 2001). However, sometimes the compounds so allowed have a very limited use or are not used at all (e.g., REGENERATIVENESS). Should we count such words as part of the language? Moreover, word formation can follow special non-morphological rules, as it happens with the principles for the nomenclature of inorganic compounds (Connelly et al., 2005). Consider DECACARBONYLDIHYDRIDOTRIOSMIUM: Is it a word of English?
- *Change*. Words change in meaning. In one type of shift, called “narrowing” (Bloomfield, 1933), the meaning of the word undergoes a change from a superordinate conceptual level to a subordinate conceptual level. For example, SKYLINE originally designated the horizon as such,

2 Following Hawthorne and Lepore (2011) on “first-level” vs. “second-level” identity criteria, we can distinguish two basic lines of inquiry in this domain. The first aims to clarify of the conditions relative to which distinct token-utterances or token-inscriptions qualify as articulations of the same word. See, for example, Kaplan’s (1990, 2011) claim that distinct token utterances or inscriptions articulate the same word if and only if they are produced with the appropriate intention. The second aims to clarify the nature and the conditions of individuation of words themselves. This paper pursues the second line of inquiry.

but it is now used to refer to the horizon qua populated by a particular kind of urban landscape. Are “old” and “new” SKYLINE the same word?

- *Homonymy and polysemy.* The form “bank” can designate a financial institution, the building where a financial institution is housed, the action of relying upon, and the side of a river. Since the last meaning is etymologically and semantically unrelated to the first two, and the third is verbal, three words are distinguished: BANK<sub>1</sub>, a polysemous noun designating either a financial institution or the building where a financial institution is housed, BANK<sub>2</sub>, a verb designating the action of relying upon, and BANK<sub>3</sub>, a noun designating the side of a river. But not all cases are so unproblematic. Consider “fluke”. It can designate certain types of flatfish, the end parts of an anchor, either half of the triangular tail of a whale, and a stroke of luck. The fourth meaning is distant from the previous three, so it plausibly deserves a dedicated count: say, FLUKE<sub>4</sub>. But what about the other three? Can they be associated to a single polysemous word, or should they be understood as senses of numerically distinct words?
- *Spelling.* “Color” and “colour” are usually taken to be variants of the same word, despite their difference in form. Now take the name MOHAMMED. Since Arabic does not notate vowels, the name has been transcribed in a wide variety of ways in English, and some of such transcriptions present important discrepancies: For example, “Mohammad” and “Mehmood”. Even if we know that they originated from the same source, the difference between the two forms is considerable, and intuitions about their being variants of the same name are less clear. What is the point up to which differences in spelling are consistent with word identity?

These are all important difficulties. However, none of them seems to warrant the conclusion that the challenge is bound to be left unanswered. Initial uncertainty about the convenience of alternative individuation decisions seems consistent with the antecedent convergence on a shared conception of wordhood, and on a shared conception of how the catalogue should be compiled. Furthermore, it seems that even if the competition between rival decisions on controversial cases turned out to be undecidable, or to surpass the limits of our understanding, the vindication of a unique, raw metaphysical fact of the matter about, for example, “the number of words available to a language (at a given time)” would remain an open possibility. It might be difficult for us to know the facts; but from this, it does not follow that there are no facts out there. Hence, it should be possible to combine undecidability about what individuation heuristics should be embraced in the compilation of the

catalogue, and the idea that beyond the veil of our epistemological limitations there have to be one metaphysically correct conception of wordhood, and one metaphysically correct catalogue-filling policy.

The goal of this paper is to contribute to the contemporary discussion on the metaphysics of words by presenting a case against this “uniqueness” assumption. I shall do so by laying out a pluralistic account of wordhood, one arguing that disputes about the privileges of competing conceptions of wordhood and competing word individuation policies admit more than a single good answer. The claim will be metaphysical, not merely epistemological. Put differently, the view will not (only) be that questions about the nature of words admit a plurality of acceptable answers, but that none of such answers can be uniquely entitled to inform us as to what wordhood consists in. Pace the received “uniqueness” assumption, wordhood is an intrinsically plural object of analysis which no monistic reduction can hope to capture in its entirety, even in unproblematic settings unaffected by the battery of issues exemplified above. To my knowledge, a pluralistic approach of this sort has not yet been considered in the contemporary discussion on the metaphysics of words.<sup>3</sup>

Before proceeding further, one caveat. One might think that the conclusion I am going to argue for is, in a sense, too intuitive. One might think that the answer to questions like “What are words?” and “How should we count word types?” is so clearly “it depends” that one should not even bother trying to justify it. Hence, one might argue that the pluralist position I am going to formulate is too commonsensical to deserve the amount of effort and attention it will be given in what follows. I think this objection should be resisted, for two main reasons.

The first reason is that the competing approaches to word individuation one can find on the philosophical market are hardly presented as “soft” epistemological heuristics lacking aspirations of metaphysical depth (for a survey, see Balletta, 2019). On average, philosophers arguing that words are entities individuated by their causal-historical origin rather than by their intrinsic properties attempt to push a substantive metaphysical point, not a point of admissible make-believe reasoning. They argue that the essence of words lies in their being entities individuated by their causal-historical origin (this is what words *are*; this is how *the* correct analysis of wordhood should proceed), not that describing words as entities individuated by their causal-historical origin supplies a coherent word individuation protocol on the background of metaphysical agnosticism.<sup>4</sup> Thus, no matter how convinced you might

3 For neighboring claims, however, see Santana’s (2016) pluralism about linguistic ontology, and Stainton’s (2014) view that linguistic entities are metaphysical hybrids with physical, mental, abstract, and social facets.

be that the answer to “What are words?” and “How should we count word types?” is “it depends”, be aware that this persuasion is only partially reflected in the current conversation on the topic.

The second reason is that the position I am going to consider is not restricted to the claim that “What are words?” and “How should we count word types?” can be answered in different ways depending on the explanatory purpose one has in mind (though this will be one chapter of the story). The idea that different construals of the nature of words and of the principles of word individuation are worthy of acceptance, is consistent with the monistic assumption that at most one of such approaches can inform us about the deep metaphysical underpinnings of wordhood. I will present a case against this assumption. On the resulting view, not only “How should we count word types?” and related questions admit, for explanatory purposes, a plurality of acceptable monistic answers, but none of such monistic answers can claim the privilege of being conducive to what words “really are”, since wordhood is an intrinsically plural object of analysis.

The roadmap of the paper is as follows. Section 2 describes a Gettier-like scenario for word individuation called “clone”.<sup>5</sup> Section 3 explicates the significance of *clone* in connection to the issues introduced in this section, and illustrates two competing analyses of the scenario. Section 4 argues that both analyses are worthy of acceptance, and lays out explanatory pluralism about wordhood. Section 5 argues that explanatory pluralism should cause us to reject metaphysical monism about wordhood, and illustrates the main implications of the claim. Section 6 concludes.

## 2. LEXICAL CLONES

Here is how “clone” runs. M and N are two communities of speakers of north-eastern New England English (henceforth, NENE), one located in Massachusetts, the other in Maine. Due to a natural

4 Two examples: “What makes tokens of a word or sentence tokens of the same word or sentence ... is, in the first instance, history, not form or function” (Millikan 1984, pp. 74–75); “Words are not individuated by their spelling, since the same word can be spelled in different ways ... Words are not individuated by their pronunciation, for the same word can be pronounced in different ways ... Words are not individuated by some combination of spelling, pronunciation and reference, for there might have been two orthographically and phonetically indistinguishable names for the same thing ... Rather, words are individuated by their origin” (Sainsbury & Tye, 2012, p. 41).

5 The case was originally described in Gasparri (2016). The discussion is indebted to that paper for the presentation of *clone* and for part of the considerations leading to Section 4. In its earlier formulation, the thought experiment was used to rescue Sainsbury and Tye’s (2012) originalism from the essentialist undertones of their proposal (i.e., the notion that words have a unique possible time and context of origination). In this paper, I offer a revised presentation of the scenario, and explore its implications in more detail to motivate a novel approach to wordhood.

disaster, the two communities have become completely isolated from one another and have no linguistic contact. At some point, by way of a strange coincidence, the two communities independently introduce in the language a new verb, BLURK, which is assigned by M and N the exact same set of linguistic properties. M and N understand the newly introduced verb to have the same pronunciation, the same orthographic form, the same semantics, the same pragmatic properties, the same argument structure, the same morphological traits, and so forth. M-BLURK and N-BLURK are thus completely indiscernible from one another as far their intrinsic features and linguistic behavior are concerned. There is no linguistic task that a member of M could perform with M-BLURK and not perform equally well with N-BLURK, and vice versa. M-BLURK and N-BLURK are, in this sense, structural-functional clones.<sup>6</sup>

So far, so good. But then another unlikely event takes place. The event involves two characters: Matt, a member of M and competent user of M-BLURK, and Neo, a member of N and competent user of N-BLURK. One day, Neo hits his head and passes out. Upon regaining consciousness, Neo finds himself among members of M. The accident has impaired Neo's ability to keep track of its location. Likewise, the people of M that are taking care of Neo have no idea of where he comes from. Shortly after waking up, Neo notices that the people around him address him in NENE. Neo responds using the same dialect. As a result, Neo believes he is among fellow members of N, and the people that are taking care of Neo believe that Neo is a native member of M. Among the inhabitants of M that are taking care of Neo, there is Matt. Matt and Neo engage in a conversation and, at some point, Matt uses BLURK. Because M-BLURK and N-BLURK are structural-functional clones, Neo succeeds in associating to Matt's utterance of BLURK the desired linguistic properties, uses himself the word, and communication flows normally. Now ask: Can we say that Neo and Matt are using (articulating, tokening, externalizing, or what have you) the same word? Have M and N independently created the same word (BLURK), or two indiscernible yet numerically distinct words (M-BLURK and N-BLURK)?

The tension surrounding *clone* is simple to point out. On the one hand, we have the success in Neo's assignment of linguistic properties to Matt's utterance. Given Neo's competence on the constitutive properties of N-BLURK and the structural-functional identity of M-BLURK and N-BLURK, Neo is guaranteed to perform well in the task of recovering the linguistic properties of Matt's BLURK-

6 One might wonder whether the combination of "function" and "structure" is the best means to encapsulate the relation I am attempting to pin down here. A finer-grained characterization should perhaps combine a collection of roles within a formal grammar with a notion of admissible usage patterns for the purpose of communicative success. However, the characterization I have provided will be sufficient for our purposes.

infused sentences. This seems to militate in favor of viewing M-BLURK and N-BLURK as the same word: In the catalogue, M-BLURK and N-BLURK should count for *one*, not for two. On the other hand, there seems to be an element of luck in Neo's interpretive accomplishment. Because Neo is not a member of M and has never been exposed to M-BLURK, it appears that any hypothesis Neo might form about the linguistic properties of BLURK-infused sentences in M is bound to succeed only because of the factual contingency that M-BLURK and N-BLURK are structural-functional duplicates, not because of bona fide linguistic competence. After all, one might say, Neo has not really learned or acquired M-BLURK within the linguistic community where it was coined. But if Neo can be ascribed knowledge of the intrinsic properties of N-BLURK but cannot be ascribed knowledge of the intrinsic properties of M-BLURK, it appears to follow that M-BLURK and N-BLURK should be classified as numerically distinct expression types (since the attitudes Neo can take to the former are not the same he can take to the latter): In the catalogue, M-BLURK and N-BLURK should count for *two*, not for one.

### 3. BUNDLES AND LINEAGES

*Clone* is significant for two main reasons. First, because it shows that word counting remains a challenging task even in a scenario where the battery of problems exemplified in Section 1 is compensated for by design. M-BLURK and N-BLURK are assumed to be phonographic, morphological, semantic, and syntactic duplicates; the case does not involve lexical change or word formation; it is immune to issues of homonymy, polysemy, and spelling irregularities. Yet, the question whether M-BLURK and N-BLURK are one or two words has no immediate answer. Second, *clone* is significant because it brings to light two equally plausible, yet fundamentally contrasting conceptions of wordhood and of the principles of word individuation, which we can now unpack and explore. For brevity, let us call the first conception the “bundle conception”, or simply “bundlism”, and the second the “lineage conception”, or simply “lineageism”.<sup>7</sup>

7 One might object that the focus on these two philosophical conceptions is suspicious, since linguistic theory offers neighboring distinctions which might be relevant to the case at hand. For example, Di Sciullo and Williams (1987) distinguish between “words” as listemes with unpredictable properties that must be memorized; “words” as morphological objects formed under the rules of word formation; “words” as the maximal threshold of sentential detail visible to syntax; “words” as phonological and orthographic objects. Why not consider these linguistic distinctions? The worry is legitimate, but the question we are dealing with can be restated in a vocabulary which makes clear that the puzzle cannot be dissolved via any simple application of linguistic theory. For example (see Bauer, 2000; Murphy, 2010): Are M-BLURK and N-BLURK the same free morpheme/listeme/lexeme or two

Bundlism can be understood as a way of bringing substance to the first diagnosis of *clone*: M-BLURK and N-BLURK are one and the same word; the expressions ‘M-BLURK’ and ‘N-BLURK’ designate a unique expression type, BLURK, which happened to emerge in the linguistic practices of two independent linguistic communities. For bundlism, words are individuated by the unique performance profile determined by their intrinsic structural-functional properties (orthographic, morphological, semantic, syntactic properties).<sup>8</sup> Since M-BLURK and N-BLURK are exactly alike in intrinsic structural-functional properties, and since in *clone* there is no grammatical reason for members of M and N to discriminate between M-BLURK and N-BLURK, it stands to reason to commit to the view that M and N have independently coined the same word. Whenever identity in properties amenable to (tacit) judgments of linguistic role or scrutiny by a formal grammar obtains, word identity follows. Words cannot differ *solo numero*. Bundlist accounts are widespread in much current work in syntax and semantics.<sup>9</sup>

Lineageism, by contrast, can be understood as a way of bringing substance to the second diagnosis of *clone*: M-BLURK and N-BLURK are numerically distinct words; the expressions ‘M-BLURK’ and ‘N-BLURK’ refer to two duplicate expression types, brought about by two distinct events of lexical coinage. The central idea of the view is that words are entities individuated by their causal-historical ancestry. Rather than on the basis of their intrinsic features, words should be individuated by considering the baptism-like circumstances in which they originated, and the chain of linguistic transmission responsible for their propagation through the population of their users. The intrinsic

numerically distinct free morphemes/listemes/lexemes? Are free morphemes/listemes/lexemes entities individuated by their performance profile or by their causal-historical ancestry? In short, the puzzle is not a byproduct of the fact that we are ignoring relevant distinctions in linguistic theory, but something that arises even if we enforce them. Thanks to an anonymous reviewer for pressing me on this.

- 8 I am including phonographic structure in the conditions for structural-functional identity, and this in light of a simple consideration. Suppose M and N had independently coined two verbs being exact duplicates with respect to reference, inflectional properties, argument structure, and so forth, but differing in orthographic properties: one verb understood to be correctly articulated through the concatenation of graphemes (or letter-types) ⟨b⟩, ⟨l⟩, ⟨u⟩, ⟨r⟩, and ⟨k⟩, the other through the concatenation of graphemes ⟨s⟩, ⟨h⟩, ⟨u⟩, and ⟨m⟩. In this scenario, we would conclude that M and N have independently coined two perfect synonyms, and there would be no puzzle to worry about.
- 9 For example, see Chomsky (2000) and Adger (2003) for approaches characterizing words as “feature bundles”; Jackendoff (2002), Barber (2003), and Ludlow (2011) for more on the philosophical underpinnings of generative linguistics; and Nefdt (2019) for a philosophical account of words which aims at “general correspondence with contemporary generative linguistic approaches to the study of language”, and appears sympathetic to bundlism in important respects.



properties of words evolve over time, so words cannot be individuated on the basis of structural-functional considerations. Since M-BLURK and N-BLURK are generated by separate events of lexical innovation, they should be viewed as distinct expression types, notwithstanding their equivalence in intrinsic properties and performance profile. Even when identity in properties amenable to (tacit) judgments of linguistic role or scrutiny by a formal grammar obtains, word identity need not follow. Words can differ *solo numero*. Lineageist accounts are prevalent among philosophers interested in the metaphysics of words.<sup>10</sup>

Now that we have stated these two competing conceptions, we can ask: Which, among bundlism and lineageism, generates the best answer to the problem raised by *clone*? Suppose we start off by thinking that preference should be given to the theory that produces the simplest account of the fact that Neo can be predicted to perform well in the task of recovering the linguistic properties and the meaning of Matt's BLURK-infused sentences. Bundlism seems to offer a straightforward explanation of the success: Neo and Matt are using the same word. We then think that bundlism enters the arena with the upper hand. But there are a couple of immediate replies available to the lineageist.

First, an explanation of Neo's interpretive success may not require assumptions of numerical identity between the expression type cognized by Neo while parsing Matt's utterance and the expression type articulated by Matt. Malapropisms and speech errors are examples in point. One might produce an utterance of "You shouldn't trust Paul, he is erudite" in the attempt to communicate that the addressee should not trust Paul because Paul is erratic, and still succeed in conveying the desired meaning because the listener is clever enough to infer that the intended adjective was not the one cued by the utterance's observable properties (see Predelli, 2010; Unnsteinsson, 2017). In this scenario, we seem to have both interpretive success, and lack of correspondence between the word articulated by the speaker (ERUDITE) and the word cognized by the listener (ERRATIC) to perform meaning recovery. The point is a general one: We can communicate by using words in novel non-literal ways, by using full-

10 Among those championing a lineageist approach to word individuation or defending views sympathetic to it in important respects, see Alward (2005), Cappelen and Dever (2001), Devitt (1983), Millikan (1984, 2005), Richard (1990), Sainsbury and Tye (2012), Sainsbury (2015), and Irmak (2019). To be sure, the theories in this list hardly make up a homogeneous front, and differ in a number of aspects. I am wrapping them into a single class here because they appear to share an overarching commitment to the idea that origination properties should be the cornerstone of a theory of wordhood, and can be understood as refined attempts to clarify the metaphysical nature of words given that background premise. I am interested in the contrast between this background premise and bundlism here. See Miller (to appear) for recent work arguing that the view that words are individuated by their history "either fails to account for our intuitions about word identity, or is too vague to be a plausible answer to the problem of word individuation".

fledged neologisms (see Armstrong, 2016), or without using words at all, as in gestural communication. In all these cases, we seem to have both successful conveyance of meaning and a situation where the people involved are not in possession of a common word used to do the communicating. In short, evidence of successful interpretation is hardly an unproblematic argument for the view that Neo and Matt must be trafficking with the same expression type.

Second, and perhaps most importantly, bundlism might lack the resources required to account for the fact that Neo's interpretive success seems to rely on a happy accident rather than on skill. Grammatical processing and communication flow normally only because M-BLURK happens to duplicate the linguistic properties of N-BLURK (or, because Matt's community happened to introduce in the language a lexical feature-bundle indiscernible from the lexical feature-bundle familiar to Neo), not because Neo is competent on the structural-functional attributes of the expression type articulated by Matt. At first glance, lineageism appears better equipped than bundlism to do justice to the intuition that Neo's interpretive accomplishment has the all-too-familiar symptoms of a case of epistemic luck.

At this point, the Bundlist has two options. The first is to resist the Gettier-like maneuver fueling the argument and insist that because *clone* is designed in such a way as to make it impossible for Neo to misinterpret BLURK-infused sentences in M, Neo can, in spite of our initial intuitions, be characterized as knowing the intrinsic properties of M-BLURK. It is true that Neo's acquisition of BLURK does not rely on deference to M, and that he may have wrong beliefs about the historical pedigree of the expression type at stake in the example. For example, in the confusion of the events, Neo might form an occurrent belief that Matt's is the utterance of a word which originally surfaced in Neo's own linguistic community. However, since deferential history and beliefs about historical ancestry are not part of the doxastic resources that play a causal role in utterance interpretation, the Bundlist might contend that in order for the epistemic objection to operate as intended, we should be provided with an antecedent explanation as to why failure to grasp the history of BLURK in M should make it impossible to ascribe Neo specifically linguistic knowledge (as opposed to, say, etymological knowledge), even in the evidence of predictably good linguistic performance. After all, for example, a speaker of English can be regarded as a perfectly competent user of the noun CAMOUFLAGE even if for some odd reason they believe it comes from Finnish.

The second option is the mirror image of the first: Reject the assumption that talk of knowledge is a felicitous means to characterize our attitude to linguistic objects and rules (see, e.g., Longworth, 2008). The idea would be that lineageist argument based on epistemic luck does not succeed because

there is no such thing as knowledge of BLURK in the first place, at least not in the sense that is relevant for the argument. On this view, the fact that Neo cannot be said to “know” the linguistic properties of M-BLURK does not lend support to lineageism because Neo cannot be said to “know” the linguistic properties of BLURK in his native native community either. We should refrain from theorizing about lexical competence and understanding using the notion of knowledge, and rely instead on attitudes weaker than those needed to secure a genuine case of epistemic luck. Thus, unless one rules out that the notion of knowledge can play no substantive role in an account of Neo and Matt’s attitude towards the words of their native communities, the Gettier-inspired case for lineageism is halted.<sup>11</sup>

Suppose the advocate of lineageism bites the bullet, and refrains from arguing that M-BLURK and N-BLURK are numerically distinct based on an analysis of Neo’s epistemic credentials. The lineageist might attempt to counterstrike by observing that even if the epistemic argument is less decisive than it initially appeared, the proposition that M-BLURK and N-BLURK are numerically distinct correlates nicely with their causal encapsulation. Even if their performance profiles match, the duplicates are used by causally isolated pools of users, so it stands to reason to classify them as distinct words.<sup>12</sup> Yet, the bundlist might object, the move is liable to a slippery slope argument. Suppose ten friends, all native monolingual speakers of German, institute an esoteric cult and decide to settle into a remote abandoned monastery, severing any possibility of contact with the outer world (no visits, no internet, no newspapers, and so forth). As soon as they set foot in the monastery, the ten friends establish a subcommunity of speakers which is causally encapsulated from the rest of German speakers. Should we infer that from the moment in which causal encapsulation is established, we are no longer allowed to characterize the language used by the members of the cult as German, and that from the moment the ten friends lock the doors of the monastery behind them, they have to be using a duplicate of German,

11 Another move could be the following: Allow talk of “knowledge” of the intrinsic linguistic properties of words but extend epistemic luck to the linguistic transactions and chains of deference occurring within the native communities of the two characters. On this basis, admit that Neo’s successful interpretation of Matt’s utterance is lucky, because it depends on the contingency that the two communities have coined two functionally indiscernible words. However, add that even in their interpretation of BLURK-infused sentences within their native linguistic communities the success of the two characters relies on a factual contingency: Namely, that their interlocutors are not incompetent users of the language, and do not feed the deferential chain with wrong beliefs about the properties of the word. I will not explore this strategy further, but it is a possibility.

12 See *Isolation* in Hawthorne and Lepore (2011): If two linguistic communities C1 and C2 are causally isolated, then performances P1 in C1 and P2 in C2 are not performances of the same word.

even if their understanding of the language is exactly alike as that of all competent speakers of German?

Another possibility would be to focus on intentions. In this case, the lineageist might want to pressure the bundlist towards admitting that, after all, in *clone* Matt cannot intend to articulate the verb familiar to Neo, since he can only intend to articulate words mastered in his native linguistic community. Similarly, it seems odd to say that M can be characterized as having intended to introduce in his language N-BLURK, and that N can be characterized as having intended to introduce in his language M-BLURK. Hence the desired diagnosis: The words are numerically distinct. Yet again, the bundlist may resist the pressure, and contend that the Lineageist maneuver is building on a set of individuation criteria for intentions that, albeit *prima facie* compelling, are not the ones we should subscribe to in this dispute. Suppose two independent programmers, Nina and Tina, having each the exact same competences in Javascript, set out to create a function designed to perform the exact same computing task (say, converting Fahrenheit to Celsius) and end up writing the exact same line of code: `Function toCels(fahr){return(5/9)*(fahr-32)}`. In this scenario, the independence of the two processes seems too rigid a stricture on the possibility of saying that Nina did intend to create the same function Tina intended to create, and that when Nina builds the function into a larger program and runs it, Nina does intend to run the function Tina had intended to create.<sup>13</sup> The same line of reasoning, the bundlist might counterattack, generalizes to *clone*. M and N are two independent communities, having each the exact same competences in NENE, which set out to create a word performing the exact same linguistic functions and end up introducing in their language the same structural-functional entity: BLURK. Even in this scenario, the independence of the two processes seems too rigid a stricture on the possibility of saying that the M did intend to create the same word N intended to create (and vice versa), and that when Matt builds the word into a larger fragment of NENE and articulates it, as in *clone*, Matt does in fact intend to articulate the word N had intended to create. Bottom line: Making a

13 Of course, Nina cannot believe that the intention she has is “to run the function Tina intended to create”. And yet, her intention itself could be characterizable as having precisely that content *de re* or “non-transparently”, as some would put it (e.g., Paul, 2014). Another telling comparison could be with the case of two causally isolated mathematicians who independently come up with the same solution to the same mathematical problem. Think of the Leibniz-Newton controversy: We typically say that Leibniz and Newton should both be given credit for independently intending to develop and successfully providing *the* same thing, the 101 of calculus, rather than for intending to develop and successfully providing two numerically distinct indiscernibles.

case for either views by insisting on intentions is a slippery move that each party may have a surprisingly easy time twisting in its own favor.

#### 4. EXPLANATORY PLURALISM

Let us take stock: The dispute between bundlism and lineageism has no prospects of a quick resolution. Indeed, it has no prospects of resolution whatsoever, and at this point I think we should ask ourselves whether there is anything to reconsider in the very idea that the competition should admit only one possible winner. As it turns out, while neither of the conceptions of wordhood embraced by two parties is clearly superior to the other on an absolute scale, both seem perfectly consistent and endowed with a distinct set of theoretical virtues. Lineageism performs well in accounting for the intuition that the interpretive accomplishments of the characters in *clone* involve an element of luck; bundlism brings to theoretical maturity the equally robust intuition that in reasoning about linguistic types, complete structural-functional indiscernibility should just mean numerical identity. Our story began with the assumption that we could rely on a unique, intuitive conception of wordhood, one we could eventually capitalize in the compilation of the catalogue if we found a way to sharpen it and push it through a variety of disturbances (recall the battery of problems illustrated in Section 1). The rules of the game were not supposed that much of a problem. We just needed to refine them enough to deal with a few uncooperative scenarios and find a way to enforce them when the evidence was recalcitrant to a simple application of the machinery. The situation we are facing now, however, is different: We have two fundamentally distinct set of rules, and both appear worthy of acceptance. The lineageist view that *clone* features two words, with its emphasis on historical ancestry, produces an ontology whose assumption seems especially suited to the reflection on the dynamics of language change, and hence to the concerns of diachronic lexical analysis and historical linguistics (see, e.g., Hale, 2007). The bundlist view that *clone* features a single word, with its emphasis on performance profile and intrinsic properties, produces an ontology whose assumption seems especially suited to the reflection on the regularities of linguistic behavior, and hence to the concerns of synchronic lexical analysis and mainstream formal linguistics (see, e.g., Egré, 2015). The upshot, I take it, is that there are reasons to put into question the intuitive requirement of a monistic approach to matters of word individuation, and consider instead explanatory pluralism: There is a plurality of explanatorily viable ontologies of words, each of which is conducive to sustained theorizing about the makeup of the linguistic world, and thus is worthy of acceptance.

Two immediate clarifications. First, why am I branding the position as explanatory “pluralism” instead of “dualism”, even if our argument so far has focused exclusively on the rivalry between bundlism and lineageism? Because, in light of current evidence, there is no reason to rule out the possibility that other conceptions of wordhood, and their associated ontologies, might prove as robust and as conducive to sustained theorizing about the makeup of the linguistic world as bundlism and lineageism. The presentation of *clone* and the combined focus on bundlism and lineageism were primarily motivated by considerations of tractability: By setting the optimal characterization of *clone* as the goal of the competition, and by focusing on the rivalry between bundlism and lineageism, we could identify in a neat dichotomous setting the attractions of renegotiating the assumption that there is at most one non-defective construal of what words are and how their numerical identity is established. However, nothing in the suggested renegotiation is committed to the further stricture that bundlism and lineageism should be taken to exhaust the landscape of virtuous ontologies of words. The position emerging is thus genuinely pluralist in that it opens the space of acceptable ways of reasoning about the nature words and their identity conditions, and is ready to acknowledge other, equally worthwhile analyses of wordhood.<sup>14</sup>

Second, one might object that I have been building on the assumption of a dichotomy between two options which are not as incompatible as my argument seems to suggest. Although bundlism and lineageism are stated as the claim that equivalence in intrinsic properties is the key to word individuation, and as the claim that equivalence in historical ancestry is the key to word individuation, respectively, why not appeal to a conception which incorporates both criteria? In other words: What if, instead of proving that bundlism and lineageism are each worthy of acceptance as such, the

14 For example, consider “ecologism”, tentatively defined as the view that the identity of words is determined by the ecological distribution of their articulations, which cannot spread across multiple encapsulated niches. Consider also a variant of *clone* where BLURK is introduced at a stage where all speakers of NENE are still integrated in a unique linguistic community that splits into M and N after the introduction of the neologism. How many BLURK expression types should we count right after the split? The bundlist and the lineageist are likely to converge on “one”, since the intrinsic properties of the verb are intact and uses of the verb in the two communities defer to the same linguistic ancestry. For an ecologist, the answer would be, surprisingly, “two”: Because M and N are encapsulated, the articulations of (what once was) BLURK now occupy two distinct ecological niches, featuring distinct environmental conditions, which might give rise to different courses of linguistic change in the two contexts. The endorsement of an ecologicist framework might be particularly apt to the explanatory goals of a sociolinguist interested in tracking the different adaptive pressures exerted on M-BLURK and N-BLURK in the two environments. For an introduction to sociolinguistics featuring a discussion of neighboring examples, see Wardhaugh and Fuller (2016).

considerations we have made so far proved that we should consider a combination of the two views? Consider “bundle-lineageism”: two words are numerically identical if and only if they are identical in structural-functional profile *and* in causal-historical properties. On bundle-lineageism, identity in historical ancestry and identity in intrinsic properties are separately necessary and jointly sufficient conditions for word identity. Should we refrain from going pluralist and embrace bundle-lineageism?<sup>15</sup>

Let me give two immediate reasons to think that the possibility of bundle-lineageism should not lead us to withdraw from explanatory pluralism. The first reason is that bundle-lineageism can be characterized as incarnation of explanatory pluralism. To illustrate the point, we can make a quick comparison to the debate on biological species (Ereshefsky, 2010). The biological literature offers several distinct definitions of the nature of species (see, e.g., Mayden, 1997). Consider three of such conceptions: The “interbreeding conception”, the “phenetic conception”, and the “phylogenetic conception”. On the interbreeding conception, species are groups of interbreeding natural populations that are reproductively isolated from other such groups. On the phenetic conception, species are groups of phenotypically similar organisms. On the phylogenetic conception, species are groups of organisms that are the result of common descent. These three approaches carve the tree of life in different ways. For example, interbreeding groups are not necessarily phylogenetic species, and many phylogenetic taxa fail to be interbreeding species. Which of these approaches reveals the nature of species? Opinions diverge on the matter. Monists insist that at most one of such conceptions can be correct; others opt for realistic pluralism; others take the issue to ultimately justify an anti-realist stance on which in nature there are no such things as biological species. However, and revealingly, none of the participants to the debate consider that the species problem can be enlightened by weakening into necessity conditions the individuation criteria contemplated by the various definitions of the species concept, and packing them into a super species concept. None of the participants to the debate, for instance, considers that an interbreeding-phenetic-phylogenetic conception of species (i.e., species are groups organisms that are capable of interbreeding *and* phenotypically similar *and* the result of common descent) would constitute an answer to the issue at stake in the debate (see, e.g., Kitcher, 1984; Dupré, 1993). The issue at stake in the debate is whether one of the basic taxonomic forces respectively called upon by, say, the interbreeding conception and the phylogenetic conception (reproductive encapsulation vs. common ancestry) is *uniquely* sufficient to provide a reliable, comprehensive analysis of specieshood. Opting for an interbreeding-phenetic-phylogenetic conception would mean granting that none of such ambitions of

15 Thanks to an anonymous reviewer for discussion on some of the points below.

monistic sufficiency can be met, that specieshood cannot be reduced to a single individuating force, and that specieshood is tied to a plural cluster of basic individuating factors: Which is the gist of explanatory pluralism. I believe these considerations should generalize to *clone*. The issue is whether one of the basic taxonomic forces called upon by bundlism and lineageism (identity in intrinsic properties vs. identity in historical ancestry) is *uniquely* sufficient to provide a reliable, comprehensive account of the nature of words. Opting for bundle-lineageism would mean granting that none of such ambitions of monistic sufficiency can be met, that wordhood cannot be reduced to a single individuating force, and that wordhood is tied to a plural cluster of basic individuating factors: Which is, again, the gist of explanatory pluralism.

The second reason is that bundle-lineageism seems vulnerable to shortcomings that a pluralist position preserving the original sufficiency claims of bundlism and lineageism appears to avoid. For illustration, recall the example under “*Change*” in Section 1. The word SKYLINE originally designated the horizon as such, but it is now used to refer to the horizon qua populated by a particular kind of urban landscape. Are “old” and “new” SKYLINE the same word? On explanatory pluralism, we can answer in the positive *and* in the negative. The answer is positive through the spectacles of lineageism, since the change takes place on a unique chain of linguistic transmission pointing to a shared historical ancestry. The answer is negative through the spectacles of bundlism, since the word undergoes a change in linguistic function. By selecting the former answer, we access the theoretical virtues afforded by thinking at the evolution of SKYLINE as the evolution of a unique linguistic unit which changes its intrinsic properties with the course of time. By selecting the latter answer, we access the theoretical virtues afforded by thinking at the evolution of SKYLINE as the transition between distinct lexical units, each performing a characteristic set of linguistic functions within the host language. On bundle-lineageism, by contrast, it seems that the only diagnosis allowed is that “old” and “new” SKYLINE must be numerically distinct, since semantic narrowing implies a change in intrinsic properties and violates the proposed conjunction of necessity conditions.<sup>16</sup> In short, bundle-lineageism appears to force us to

16 Objection: There is room for controversy about which expression-type properties get to count as intrinsic and extrinsic, so one could argue that changes in meaning of the kind found in the SKYLINE example actually preserve intrinsic properties, and on that basis infer that bundle-lineageism *can* regard “old” and “new” SKYLINE as the same word. Reply: If the SKYLINE example is not completely convincing, feel free to consider another case involving a more remarkable gap in observable features. Example: In 14th-century English the adjective AGHEFUL, a compound of AGHE and -FUL, meant “worthy of respect or fear, striking with awe”. Over the course of the centuries, AGHEFUL became AWFUL as present-day speakers of English understand the term, meaning “extremely bad or unpleasant” (as in “An awful state of affairs”) or “very great” (as in “An awful lot of work”). To generalize the objection to the



take a step back from the widely shared practice of conceiving of words as entities that can undergo remarkable changes in intrinsic properties *salva identitate*. By contrast, the pluralist position does not incur in this cost.

So back to explanatory pluralism: There is a plurality of explanatorily correct conceptions of wordhood, each of which is worthy of acceptance in its own right. For example, the bundlist diagnosis that *clone* contains one BLURK word brings to the explanatory foreground the facts about equivalence in linguistic function and structure at work in the scenario: The ontology it produces is theoretically virtuous and correct in that respect. Likewise, the lineageist diagnosis that *clone* contains two indiscernible BLURK words captures the facts about distinct historical ancestry at work in the scenario: The ontological model it produces is theoretically virtuous and correct in that respect. But there is a further complication. Suppose you are sympathetic to the case against explanatory monism: There are indeed reasons to believe that the two verdicts on *clone* produced by bundlism and lineageism are equally worthy of acceptance. Now, explanatory pluralism does not warrant any simple elimination of the plea for metaphysical monism. Even if we recognize that the bundlist program and the lineageist program produce both acceptable word individuation policies, and that reflecting on which standard is descriptively superior is futile outside the context of a specific explanatory interest, we are still in a position to entertain the possibility that, unbeknownst to us, only one of the two tracks the epistemically unrestricted inventory of words available in the scenario under investigation, and, correlatively, that one of them has privileges of metaphysical correctness. The fact that the competition between bundlism and lineageism is open on the explanatory end does not license the conclusion that there is no non-plural fact of the matter about “how many words there really are in *clone*”, or about “what words really are”. Quite the opposite, one could argue: The attractions of explanatory pluralism should not lead us to withdraw from the idea that wordhood is a singular object of analysis whose metaphysical essence is apt to be captured by a monistic reduction (though we might completely ignore which one given our current epistemological limitations).<sup>17</sup> Here, then, is then last question I will

transition between AGHEFUL and AWFUL, and allow bundle-lineageism to be serious about talk of AGHEFUL “becoming” AWFUL without changes in numerical identity, one would have to argue that the combined variation in meaning and form found in this particular example is extrinsic. This seems problematic. While we can accept the possibility of controversy about which fine-grained changes in expression-type properties get to count as intrinsic and which as extrinsic, it seems safe to claim that words like AGHEFUL and AWFUL, which are separated by a macroscopic difference in meaning and form, should be regarded as differing in intrinsic properties.

17 Another species-based analogy can help us clarify the point (see again Ereshefsky, 2010). Suppose you believe in epistemological pluralism about the species concept: a plurality of species concepts is worthy of acceptance and

consider. We have reached explanatory pluralism about wordhood: What position should this cause us to assume with respect to the possibility of metaphysical monism?

## 5. A PLURAL METAPHYSICS

Suppose we are inclined to couple explanatory pluralism with metaphysical monism. We believe that, irrespective of their equivalence in explanatory virtues, at most one of the parties involved in the competition between bundlism and lineageism can inform us about the metaphysical underpinnings of wordhood. To determine which one, however, we cannot rely on considerations of absolute explanatory power. Suppose instead we readdress the competition between bundlism and lineageism by means of considerations of systematic appeal which are independent from the way the two frameworks make sense of contentious cases like *clone*. Put differently, instead of evaluating the attractiveness of the two individuation policies based on their explanatory output, we may assess them based on more foundational considerations about their chances of zeroing in on a metaphysically cogent object or taxon. The operation could be implemented in a variety of ways. But here is an instructive one. Suppose we have reasons to believe that in choosing among rival reasoning heuristics for our metaphysical moments, *ceteris paribus* we should prefer those whose criteria pick out objectively natural properties, à la Lewis (1983) or Sider (2011). Suppose also that the property of being part of the same causal-historical lineage can be proven to be objectively more natural than having the same intrinsic linguistic properties. The combination of these two premises, one could think, would give us a reason to bypass explanatory pluralism, and develop a combined framework where bundlism and lineageism are both accepted, on explanatory grounds, as worthy monistic ontologies of words, but where only lineageism can be taken to inform us about the metaphysical underpinnings of wordhood.

However, there are reasons to doubt that an appeal to objective naturalness, besides viable, would also be relevant in the context of adjudicating which, among bundlism and lineageism, has the highest chances of leading to the holy grail of metaphysical adequacy. The issue is not that there is no agreement on what role appeals to naturalness should be allowed to play in adjudicating the

conducive to fruitful theorizing. This brand of epistemological pluralism appears compatible with a few metaphysical positions. It can be combined without obvious contradiction with, among others, metaphysical monism (i.e., the view that at most one species concept can inform us of what species *really* are), realistic pluralism (i.e., the view that the organic world is simultaneously organized in a plurality of species kinds tracked by the different species concepts), and eliminativism (i.e., the view that there are no “species” in the natural world). Which combination should we opt for? We find ourselves in a similar situation at this juncture of the discussion.

competition among rival theories (on this, see, e.g., Dorr & Hawthorne, 2013), nor is it that the benchmark of objective naturalness possibly shared by the bundlism and lineageism is hard to identify. Suppose the two parties agree that the individuation criterion of lineageism ranks higher on the scale of objective naturalness. After all, the property adjudicating wordhood on lineageism (shared historical ancestry) lends itself to an easy reduction to low-level properties (e.g., spatio-temporal continuity among articulations), whereas the property adjudicating wordhood on bundlism does not. Does it follow that lineageism has metaphysical privileges over bundlism, and gives us the only word individuation policy we should consider when, leaving aside their match in explanatory power, we start being serious about metaphysics? Or, that moving past the plurality of individuation policies one can coherently embrace on interest-relative grounds, lineageism is our best bet to settle the questions of how many words there really are in *clone*? Well, not until we have an independent argument that wordhood should be reduced to anything natural, and that considerations of comparative naturalness are an effective means to track its distribution in the external world. Bundlists can resist both assumptions. For example, they could grant that the continuant-like taxa individuated through the conceptual spectacles of lineageism are more natural than their feature bundles, and perhaps even metaphysically real, but insist that from their conceptual standpoint there is no reason to call them “words”, since, for example, entities bearing properties like “being able to combine with the suffix -s” are hardly anything we should aim to make sense of within the dogma of “maximize naturalness”.

To be sure, betting on objective naturalness is just one possible way of committing to explanatory pluralism while reintroducing monism through the back door. Yet, I think that the bundlist’s reaction to the pressure from naturalness has a more general significance and is symptomatic of a larger issue, which militates against the idea that explanatory pluralism and metaphysical monism are a consistent match when it comes to reflecting on words. Bundlists can in principle converge with lineageists on the proper deployment of all possible sorts of foundational conceptual parameters and standards for metaphysical reasoning (e.g., naturalness). The problem, to put it concisely, is that the two parties are not producing rival metaphysical accounts of a shared object of analysis. Bundlists and lineageists both call causal-historical continuants and clusters of intrinsic linguistic properties “words” and discuss as if they were debating on what approach reveals the deep nature of the unique object they are trying to pin down. In reality, rather than debating with its opponent on the characterization of a shared object of analysis, each of the two approaches is implicitly shifting the locus of argumentation to a *precisified* object of analysis: Bundles of synchronic features and taxa defined by historical ancestry. They each

draw their attention towards the complex conceptual space associated by default to the non-precisified notion of word, which features both intrinsic properties such as “being able to combine with the suffix -s” and causal-historical properties such as “having such and such origination”; they restrict their focus on a selected aspect of this conceptual space; they build a theory describing the properties of the taxon or theoretical object individuated by the restriction on those properties (bundle-words and lineage-words); finally, they claim that the resulting theory is a good account of the metaphysical underpinnings of the non-precisified notion inspected at the beginning of the process.

If this reconstruction is correct in its essential features, the combination of explanatory pluralism with metaphysical monism is not a sustainable option. Despite initial appearances, the root of the dissonance between bundlism and lineageism is not the disagreement on the proper analysis of a shared precisification of the term “word”, but rather the commitment to distinct precisifications of the pluralistic collection of base properties and taxa designated by term “word”. Correlatively, the reason why the dichotomy between bundlism and lineageism persists in spite of all sorts of attempts to dissolve it, is that the two frameworks target different aspects or facets of a pluralistic subject matter. Wordhood is associated to a pluralistic landscape of interesting finer-grained concepts, corresponding the various monistic precisifications of the notion that theorists can pick by embracing frameworks like bundlism and lineageism, none of which can have substantial privileges over the others when it comes to deciding which one best represents the entire category. Hence, we should consider complementing the view that both bundlism and lineageism allow the theorist to produce sustained and coherent theorizing, with an explicit rejection of metaphysical monism: Deciding which monistic approach brings us closer to an understanding of the singular metaphysical essence of wordhood is simply not possible. The notion of “word” delineates an intrinsically plural conceptual space which singular precisifications of the concept can capture only in part, and which no non-plural ontology can reasonably claim to describe in its entirety.

Naturally, I am not saying that the initial impression that the two parties compete on the analysis of a shared subject matter is without reason. Quite the contrary. The impression is a product of the fact that both bundlism and the lineageism advertise themselves as answers to the problem of “the nature of words”, which leads one to expect that the competition between the two frameworks should indeed be characterizable as the clash between two rival characterizations of a unique subject matter. Theorists advocating a univocal bundle-like or lineage-like theory seem to presuppose that because the declared object of their analysis is “the nature of words” (*sic*) and the properties targeted by their respective

frameworks are distinct, at most one of them can incorporate the essence of wordhood. I believe we should be skeptical about this initial impression.

I am also not saying that the bundlism and lineageism, as well as any other word individuation policy might prove worthy of pursuit, are in principle unfit to zero in on metaphysically real objects or kinds. Once the appropriate precisifications are declared and the locus of argumentation is stated (e.g., one makes clear that with their usage of “word” they are picking out bundle-words, lineage-words, or anything else), we are left with a practice that may indeed track non-theoretical joints of nature. It is projects of this sort, I submit, that philosophers should focus on: Look at the fundamental roles or relations of connectedness designated by the different precisifications of the notion of word we need to theorize about language, try to figure out what, if anything, plays those roles in the world, and see if such objects can serve some interesting non-theoretical function.<sup>18</sup> The point I am making against current approaches subscribing to the “uniqueness” assumption and trying to provide an overarching solution to the issue of the metaphysics of words (again, *sic*), is that the facts these alternative accounts are concerned with can only answer a precisified interpretation of the questions “What are words?” and “How should words be individuated?” (e.g., “What are bundle-words?”, “How should lineage-words be individuated?”), not the questions “What are words?” and “How should words be individuated?” *simpliciter*.

One last comment. I have hinted that the theoretical objects produced by different monistic precisifications of the notion of word (e.g., lineage-words and bundle-words) may track metaphysically real joints of nature. The pluralist position I have illustrated is, in this sense, not necessarily deflationary, since it does not claim that the debate on the metaphysical status of lineage-words or bundle-words is shallow or trivial; nor necessarily anti-realist, since it does not carry a commitment to the idea that no incarnation of the notion of word can correspond to anything we would accept as part of a mature or complete theory of what exists. I leave to further work whether pluralism should have any of these implications. That said, I am inclined to think that a realistic interpretation of metaphysical pluralism should not be our default option. Consider the following. Linguists commit to objects such as traces and null complementizers to illuminate the grammatical organization of sentences and render them amenable to theoretical scrutiny. The explanatory success of the theories built on the assumption of such ontologies, however, is hardly a sufficient reason to think that syntactic traces or null

18 For example, ask if you can build a metaphysics where they serve as constituents of the objects of propositional attitudes, as Cappelen and Dever (2001) do about Kaplanian chains. Bromberger (2011, pp. 498–503) makes a very similar point.

complementizers should be understood as metaphysically real objects or kinds. Likewise, we might commit or even need to commit to a given ontology of words (say, lineageism) to provide a tractable description of the organization of language change. However, we can benefit from all the epistemic goods of this modeling enterprise even if we doubt that lineage-words are part of the furniture of the world.<sup>19</sup> After all, the primary rationale for zeroing in on entities such as lineage-words and bundle-words is that by having them in our theoretical arsenal we can perform descriptive and explanatory work we would not be able to perform otherwise. Before accepting realistic pluralism, one would need to show that the situation we face in reflecting about the status of entities such as lineage-words and bundle-words is fundamentally different from the one we face in reflecting about the status of denizens like syntactic traces, for which anti-realism would strike many as the reasonable default option.

## 6. CONCLUSION

The paper has proceeded as follows. Section 1 provided a brief illustration of some common issues encountered in word individuation scenarios, and introduced the topic of the paper. Section 2 described *clone* and offered an initial characterization of two admissible analyses of the scenario. Section 3 provided an explicit formulation of the tenets underlying the two analyses of *clone*, one based on the notion that words are individuated by their structural-functional properties (bundlism), one based on the notion that words are individuated by their causal-historical ancestry (lineageism), and offered a few arguments in favor and against both positions. Section 4 presented the case for explanatory pluralism about wordhood: The view that there is a plurality of epistemically virtuous ways of thinking about the nature of words. Section 5 argued that explanatory pluralism about wordhood should cause us to reject “backdoor” metaphysical monism, and described metaphysical pluralism about wordhood.

Along the way, I have presented two main claims. First, that careful inquiry into the rivalry between ontologies of words focusing on historical ancestry and ontologies of words focusing on equivalence in structural-functional attributes, generates a case for explanatory pluralism about wordhood. Second, that we should consider complementing explanatory pluralism with metaphysical pluralism: The view that wordhood is an intrinsically plural object of analysis that no monistic reduction can hope to capture in an exhaustive manner.

19 A predicament shared by other sciences. For example, physicists routinely appeal to explanatory ontologies featuring point-masses, resultant forces, and gravitational fields even if they would hardly commit to the existence of the objects designated by these notions. For more on the use of idealizations and abstractions in science, see, for example, Azzouni (2010). For an anti-realist approach to linguistic types, see, for example, Rey (2006).

## References

- Adger, D. (2003). *Core syntax: A minimalist approach*. Oxford: Oxford University Press.
- Alward, P. (2005). Between the lines of age: Reflections on the metaphysics of words. *Pacific Philosophical Quarterly*, 86 (2), 172–187.
- Armstrong, J. (2016). The problem of lexical innovation. *Linguistics and Philosophy*, 39 (2), 87–118.
- Azzouni, J. (2010). *Talking about nothing: Numbers, hallucinations, and fictions*. New York: Oxford University Press.
- Balletta, S. (2019). The metaphysics of words. *Theoria*, 85 (1), 31–48.
- Barber, A. (Ed.) (2003). *Epistemology of language*. Oxford: Oxford University Press.
- Bauer, L. (2000). Word. In Booij, G. E., C. Lehmann, and J. Mugdan, (Eds.), *Morphology: An international handbook on inflection and word-formation*, Vol. 1 (pp. 247–257). Berlin: De Gruyter.
- Bauer, L. (2001). *Morphological productivity*. Cambridge: Cambridge University Press.
- Bloomfield, L. (1933). *Language*. New York: Allen & Unwin.
- Bromberger, S. (2011). What are words? Comments on Kaplan, on Hawthorne and Lepore, and on the issue. *Journal of Philosophy*, 108 (9), 485–503.
- Cappelen, H., and J. Dever (2001). Believing in words. *Synthese*, 127 (3), 279–301.
- Chomsky, N. (2000). *New horizons in the study of language and mind*. Cambridge: Cambridge University Press.
- Connelly, N. G. et al. (2005). *Nomenclature of inorganic chemistry: IUPAC recommendations*. London: RSC Publishing.
- Di Sciullo, A. M., and E. Williams. (1987). *On the definition of word*. Cambridge, MA: MIT Press.
- Devitt, M. (1983). Dummett's anti-realism. *Journal of Philosophy*, 80 (2), 73–99.
- Dorr, C., and J. Hawthorne (2013). Naturalness. *Oxford Studies in Metaphysics*, Volume 8, 3–77.
- Dupré, J. (1993). *The disorder of things: Metaphysical foundations of the disunity of science*. Cambridge, MA: Harvard University Press.
- Egré, P. (2015). Explanation in linguistics. *Philosophy Compass*, 10 (7), 451–462.
- Ereshefsky, M. (2010). Species. In Zalta, E. N., (Ed.), *The Stanford Encyclopedia of Philosophy* (Spring 2010 Edn.). URL = <http://plato.stanford.edu/archives/spr2010/entries/species/>
- Gasparri, L. (2016). Originalism about word types. *Thought* 5 (2), 126–133.
- Hale, M. (2007). *Historical linguistics: theory and method*. Malden, MA: Blackwell.

- Hawthorne, J., and E. Lepore. (2011). On words. *Journal of Philosophy*, 108 (9), 447–485.
- Irmak, N. (2019). An ontology of words. *Erkenntnis*, 84 (5), 1139–1158.
- Jackendoff, R. S. (2002). *Foundations of language*. Oxford: Oxford University Press.
- Kaplan, D. (1990). Words. *Proceedings of the Aristotelian Society*, 64 (1): 93–119.
- Kaplan, D. (2011). Words on Words. *Journal of Philosophy*, 108 (9), 504–529.
- Kilgariff, A. (2015). How many words are there? In Taylor, J. R., (Ed.), *The Oxford handbook of the word* (pp. 29–36). Oxford: Oxford University Press.
- Kitcher, P. (1984). Species. *Philosophy of Science*, 51 (2), 308–333.
- Lewis, D. K. (1983). New work for a theory of universals. *Australasian Journal of Philosophy*, 61 (4), 343–377.
- Longworth, G. (2008). Linguistic understanding and knowledge. *Noûs*, 42 (1), 50–79.
- Ludlow, P. (2011). *The philosophy of generative linguistics*. New York: Oxford University Press.
- Mayden R. L. (1997). A hierarchy of species concepts: The denouement in the saga of the species problem. In Claridge, M. F. H., H. A. Dawah, and M. R. Wilson, (Eds.), *Species: The units of diversity* (pp. 381–423). London: Chapman and Hall.
- Millikan, R. G. (1984). *Language, thought, and other biological categories: New foundations for realism*. Cambridge, MA: MIT Press.
- Millikan, R. G. (2005). *Language: A biological model*. Oxford: Oxford University Press.
- Miller, J. T. T. (to appear). On the individuation of words. *Inquiry*, DOI: <https://doi.org/10.1080/0020174X.2018.1562378>.
- Murphy, M. L. (2010). *Lexical meaning*. Cambridge: Cambridge University Press.
- Nefdt, R. M. (2019). The ontology of words: A structural approach. *Inquiry*, 62 (8), 877–911.
- Paul, S. K. (2014). The transparency of intention. *Philosophical Studies*, 172 (6), 1529–1548.
- Predelli, S. (2010). Malapropisms and the simple picture of communication. *Mind & Language*, 25 (3), 329–345.
- Rey, G. (2006). The intentional inexistence of language – but not cars. In Stainton, R. J., (Ed.), *Contemporary debates in cognitive science* (pp. 237–255). Oxford: Blackwell.
- Richard, M (1990). *Propositional attitudes: An essay on thoughts and how we ascribe them*. Cambridge: Cambridge University Press.
- Sainsbury, R. M. (2015). The same name. *Erkenntnis*, 80 (S2), 195–214.



- Sainsbury, R. M. and M. Tye. (2012). *Seven puzzles of thought and how to solve them: An originalist theory of concepts*. New York: Oxford University Press.
- Santana, C. (2016). What is language? *Ergo*, 3 (19), 501–523.
- Sider, T. (2011). *Writing the book of the world*. Oxford: Oxford University Press.
- Stainton, R. J. (2014). Philosophy of linguistics. *Oxford Handbooks Online*. DOI: <https://doi.org/10.1093/oxfordhb/9780199935314.013.002>.
- Unnsteinsson, E. (2017). A Gricean theory of malaprops. *Mind & Language*, 32 (4), 446–462.
- Wardhaugh, R., and J. M. Fuller (2016). *An introduction to sociolinguistics*. 7<sup>th</sup> edn. Malden, MA: Wiley-Blackwell.
- Wetzel, L. (2009). *Types and tokens: On abstract objects*. Cambridge, MA: MIT Press.